

1 Interview Summaries

1.1 Department of Human Services, (DHS) Bureau of Health (BOH)

Interview Type	Personal, State Agency
Interview Location	BOH Office, 157 Capitol Street, Augusta
Interview Date	October 23, 2001
Summary Date	December 27, 2001
Interviewer	AGI / Richard Sutton (rs@appgeo.com)

Interviewed:	
Kathy Tippy,	MCH Epidemiologist, kathy.i.tippy@state.me.us
Hugh Cowperthwaite,	DHS Drinking Water Program, hugh.cowperthwaite@state.me.us
Doris Russell,	Office of Data, Research and Vital Statistics, doris.russell@state.me.us
Allison Foster,	Maine Health Information Center, afoster@mhic.org
Andy Tolman,	DWP – Source Protection, Andrew.I.Tolman@state.me.us
Chris Paulu,	DHS-BOH Environmental Toxicology Program, chris.paulu@state.me.us
Mishelle Mosher,	BOH, Office of Rural Health and Primary Care, michelle.mosher@state.me.us

Staff Size, DHS (approx)	2530
Budget DHS (approx)	\$1, 670,000,000
Staff Size, BOH (approx)	294
Budget BOH (approx)	\$42,000,000

URL (DHS)	http://www.state.me.us/dhs/welcome.htm
URL (BOH)	http://www.state.me.us/dhs/boh/index2.htm

1.1.1 Agency Overview

The Department of Human Services works to protect and preserve the health and welfare of Maine citizens through programs, policies and services established by federal and state laws. DHS directs a wide-ranging system of programs in health, social services, income maintenance, public health and medical services.

The BOH promotes health through education and exercise of public policies, conducts disease surveillance and control measures, and works to diminish environmental health hazards.

1.1.2 GIS Initiatives

1.1.2.1 Overview of GIS Utilization

DHS-BOH utilizes GIS in varying ways, but applications are fragmented and most are only in the earliest stages of development. Epidemiological and health applications are prime candidates for GIS and the Bureau understands this, but it is only beginning to adopt the technology to serve its needs. Notably, DHS through the Drinking Water Program has an extremely high quality Web-mapping application that can serve as an example of data access from the Department as well as other agencies statewide.

1.1.2.2 GIS Operating Environment and Infrastructure

A small number of ArcView and MapInfo licenses were reported by interview participants, along with an ArcInfo license in the Drinking Water Program (DWP).

1.1.2.3 GIS Data Resources and Requirements

1.1.2.3.1 Spatial Data

Existing data sets include:

- Public Water Supply Wells (approx. 2,200, statewide)
- Public Water Supply Surface Water Intake points (approx. 60 statewide)
- Health Planning Areas
- Primary Care Analysis Areas
- Baselayers from MeGIS

Currently unavailable but desired data sets include:

- Completed statewide wells and intake points: these will be released to MeGIS for distribution upon completion. These are linked to compliance data to satisfy federal reporting requirements.
- Aquifers
- Epidemiology data
- Geocoded points for arsenic and other analytes
- Geocoded locations of health professionals
- Accurate service areas of water utilities

1.1.2.3.2 Attribute Data

- Significant quantities of epidemiological and analyte data exist within the bureau that could be geocoded to accurate E-911 roads with little effort and used for epidemiological and analysis purposes. These include birth and death information as well as cancer registry data.

1.1.2.4 GIS Applications and Application Requirements

- The most significant GIS application serving the BOH is the Maine Drinking Water Program Public Water Resources Map application, available through the Web at: <http://musashi.ogis.state.me.us/dhs/html/wellsmap.htm> . This application was built by Northern Geomatics in ESRI ArcIMS and elegantly and effectively delivers information on public water supply wells, surface water intakes, wellhead protection areas, intake protection areas, direct watersheds of public water supplies and basemap reference information. This is presently the best application of its kind deployed from a Maine state agency to the general public. It is served out of MeGIS.
- Some data are currently posted for public viewing. Frequency of rabid animals identified are available and viewable in map form for all years since 1994 at <http://www.state.me.us/dhs/etl/rabies/rabies.htm> .

Planned future GIS activity and applications:

- Lead Program: Tracking of asthma cases, as well as integration with data sources describing structure age and demographics to proactively identify lead hazards.
- Health Planning Areas and Census analysis
- Fish consumption guidelines mapping by Environmental Toxicology Program

1.1.3 Other Relevant Issues

- Vast quantities of information that is tracked and processed by DHS – BOH can be geocoded and mapped to provide significant analytical utility. Much of this data could be quickly addressmatched to accurate E-911 roads and made available to the public as well as staff analysts. Examples of candidate data sets include:
 - Confirmed cases of West Nile Virus in birds
 - Immunization totals
 - Plumbing permits
 - Births, Deaths and Marriages

1.1.4 Major Benefits and Cost Justification

The Department of Human Services and the Bureau of Health will benefit from deeper GIS integration. Much of the base data necessary as a foundation for meaningful analysis is presently available through MeGIS, Maine DEP or the US Census. Combining these data sources with geocoded Department information will yield analytical task efficiencies and qualitative benefits.